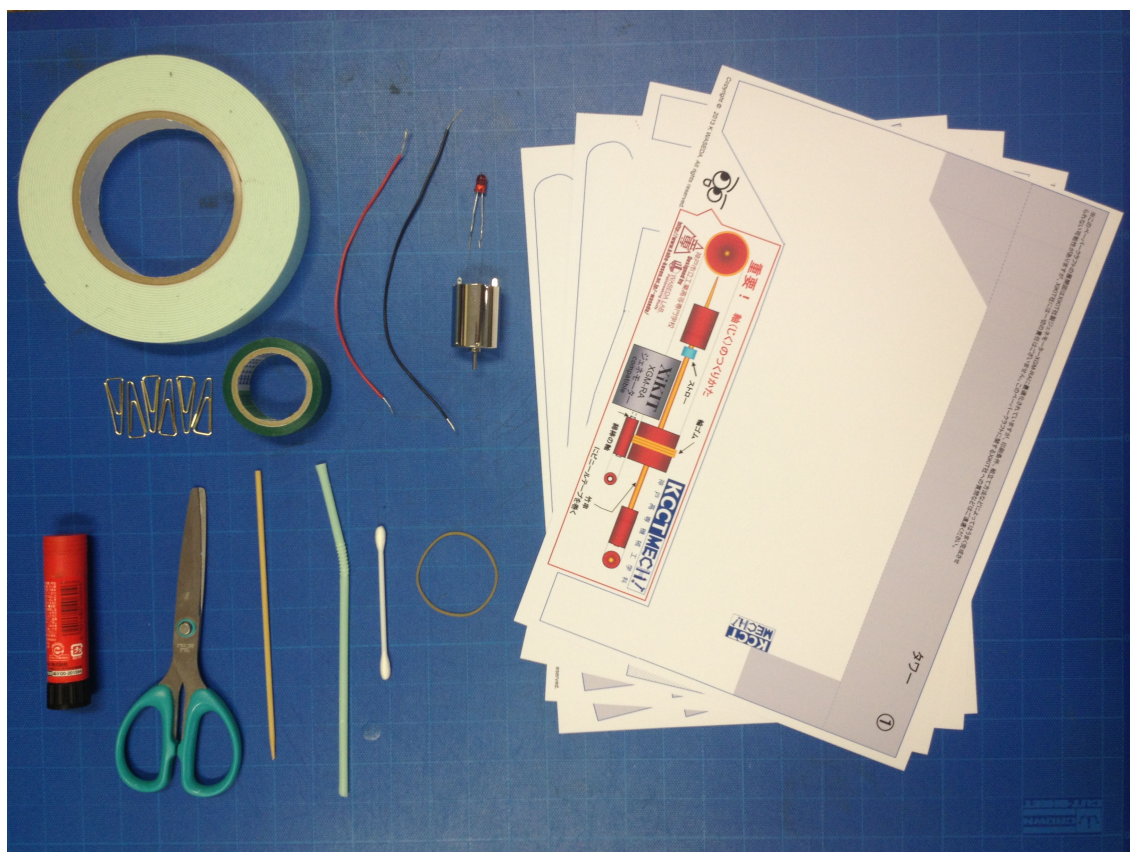


Paper Craft Wind Turbine

~Upwind Ver.~

Assembly Manual

- Preparation

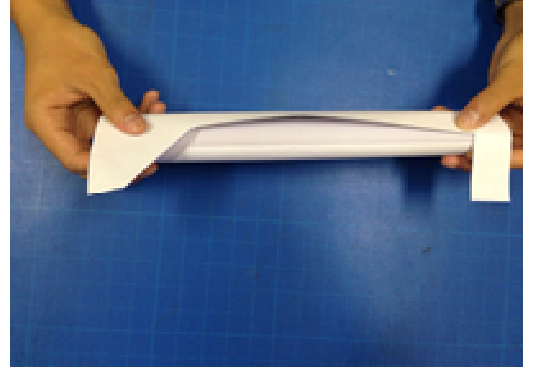
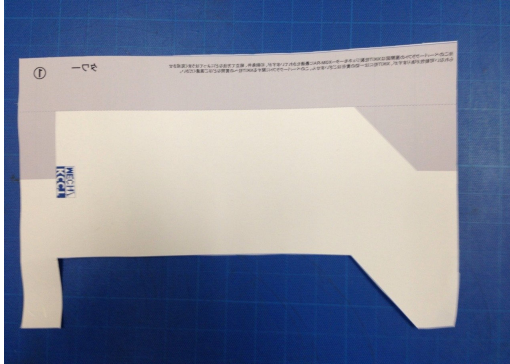


- Base sheets ×4
- paper clips ×6
- conductor leads ×2
- LED ×1
- Rubber band ×1
- Cotton swab (hollow plastic grip) ×1
- Straw ×1
- bamboo skewer (length 150 mm) ×1
- motor ×1
- scissors
- glue
- double sided tape
- plastic tape

First, cut out all the needed parts along the solid blue lines.

1. [Tower]

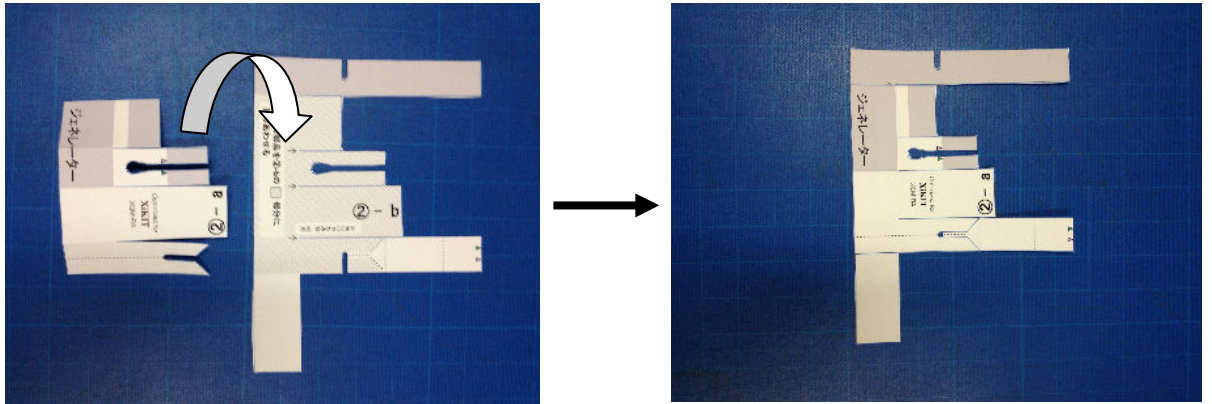
- ① Put on some glue on the glue tab (the purple section) and wind it in a cylinder shape.



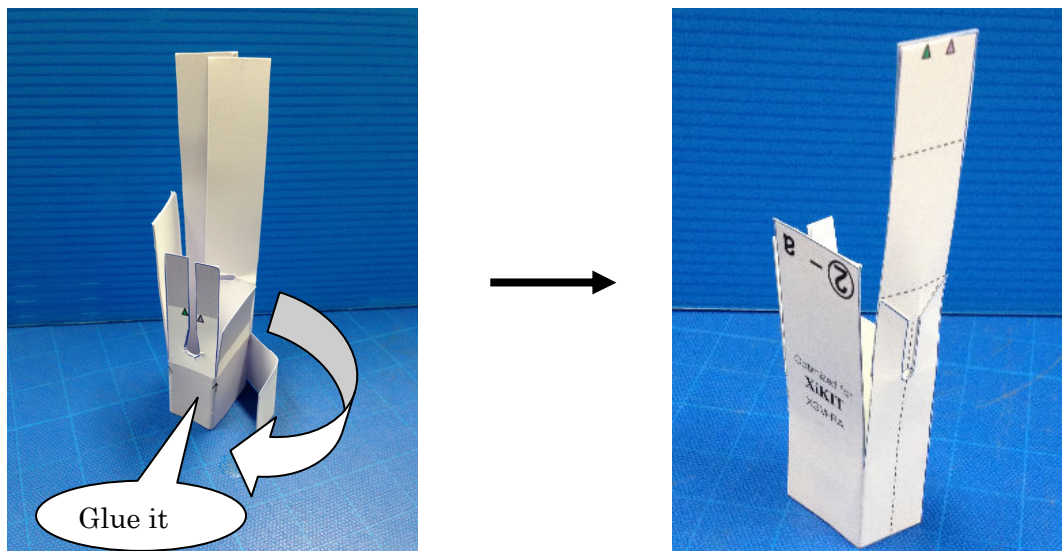
2. [Motor Section]

2-1 Outer Casing

- ① Glue part no.2-a on top of part no.2-b.

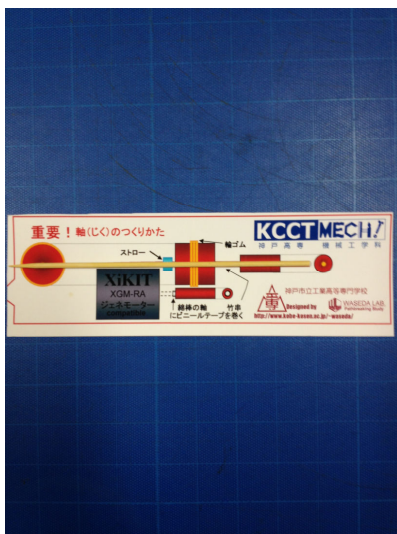


- ② Fold the assembled part in a boxed shape and glue it.

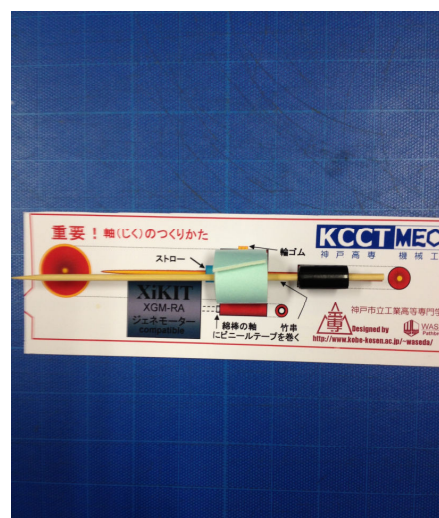
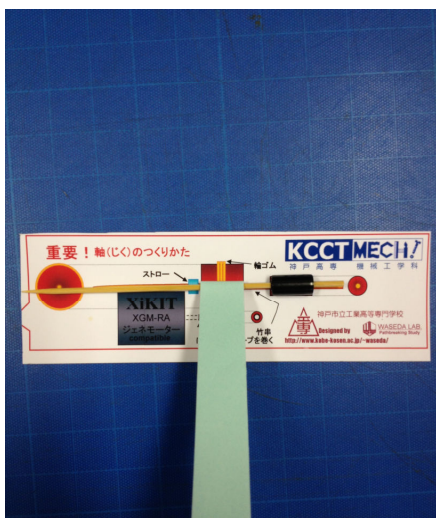


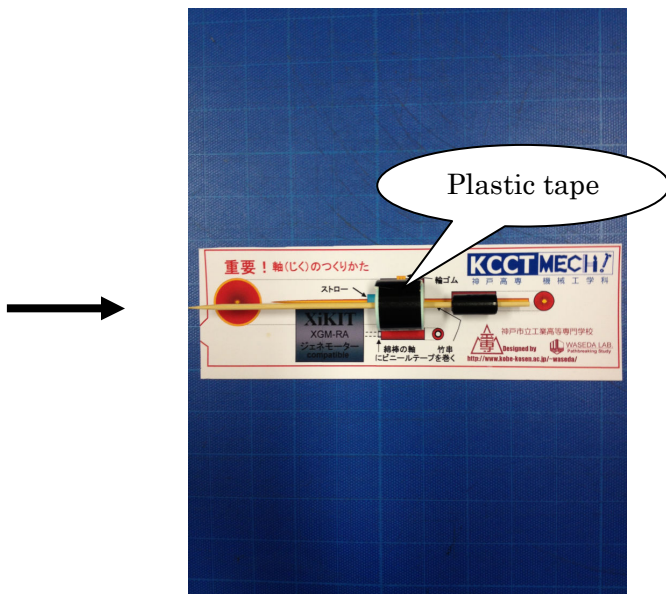
2-2 Central Axis

①Wrap the plastic tape around the bamboo skewer (length 150 mm) until the diameter reaches the directed size which is shown in the direction “Axis full sized sample”.

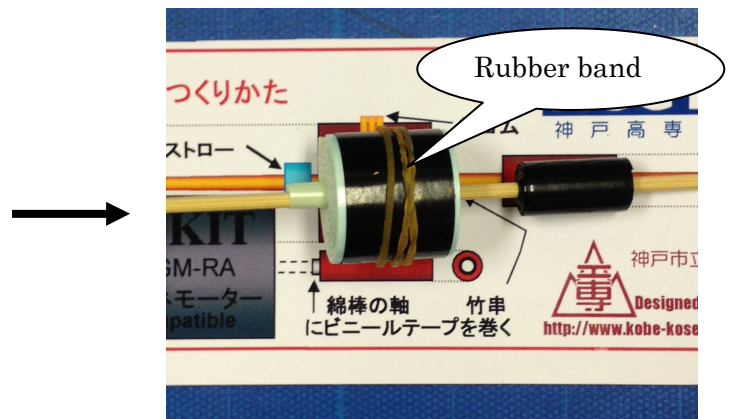
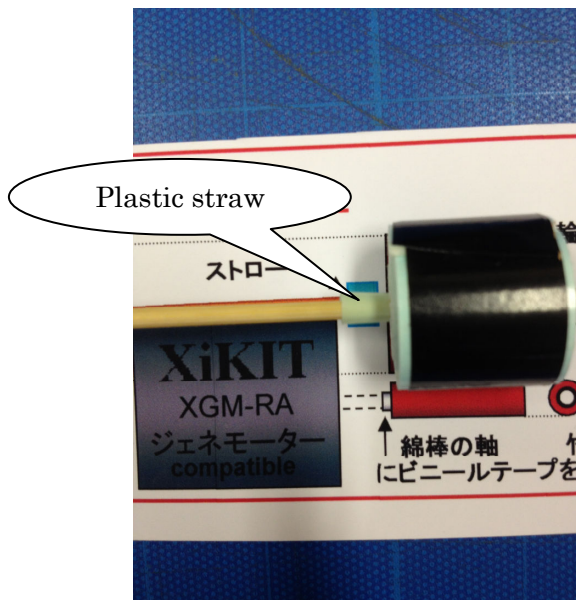


②Wrap the double sided tape around the bamboo skewer until the diameter reaches the directed size which is shown in the direction “Axis full sized sample”. After the double sided tape is wrapped until the directed size, wrap it over with the plastic tape to make it stay in place.



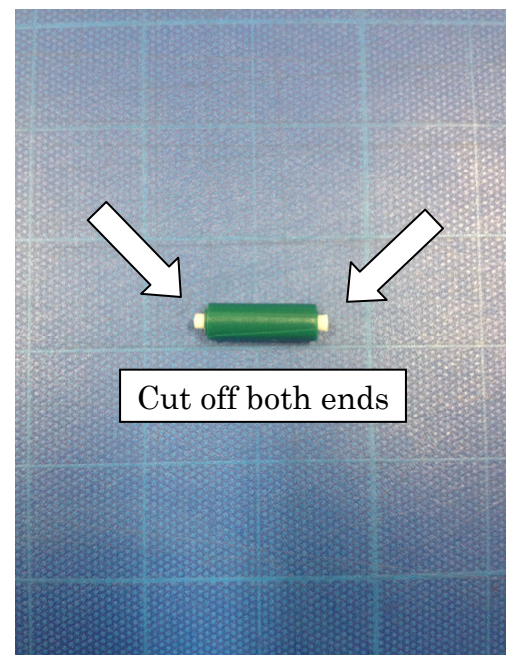
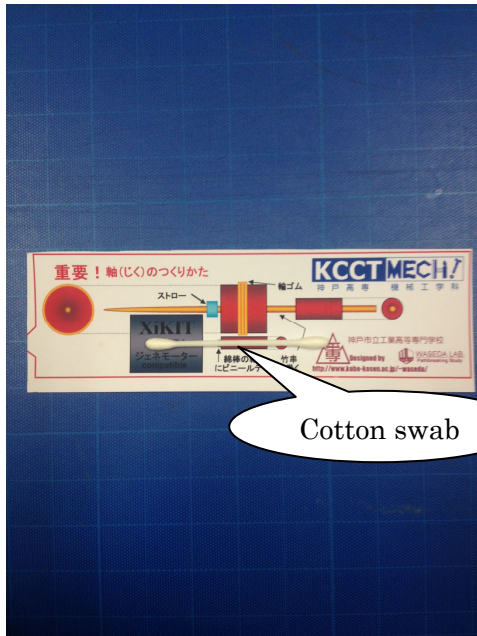


③Put on a shortly cut plastic straw through the bamboo skewer. Secondly, wrap a rubber band around the plastic tape following to the photo below.



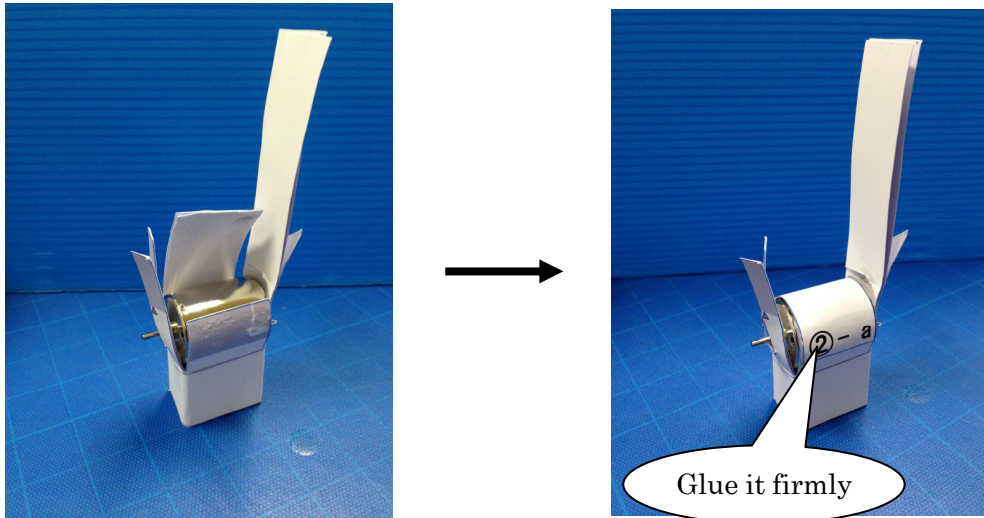
2-3 Axis for the Motor

- ① Wrap the plastic tape around the cotton swab until the diameter reaches the directed size which is shown in the direction “Axis full sized sample”. Afterwards cut off both ends of the cotton swab.

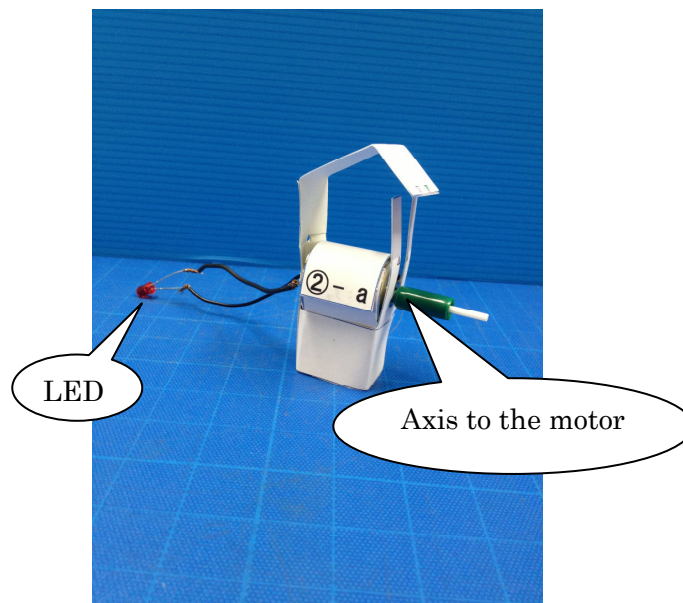


2-4 Motor Case Assembling

- ① Place the motor in the motor case and glue it.

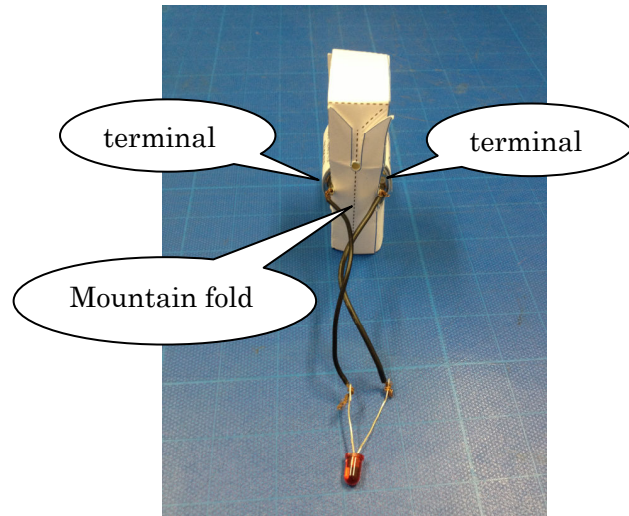


- ② Put on the motor axis to the motor and link the LED.

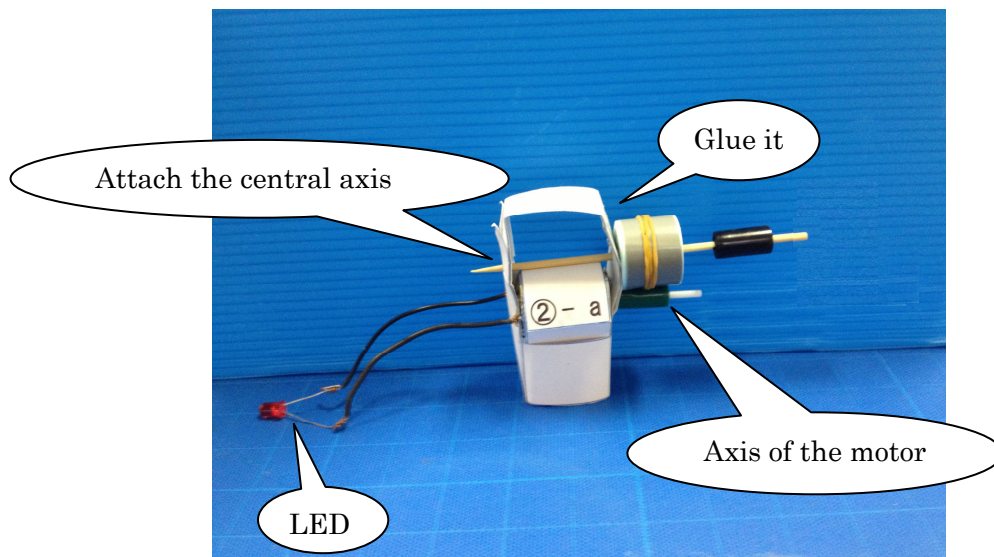


(Assembling Tips)

Mountain fold the motor case to show the joining terminal outside so that you could attach the LED easily.



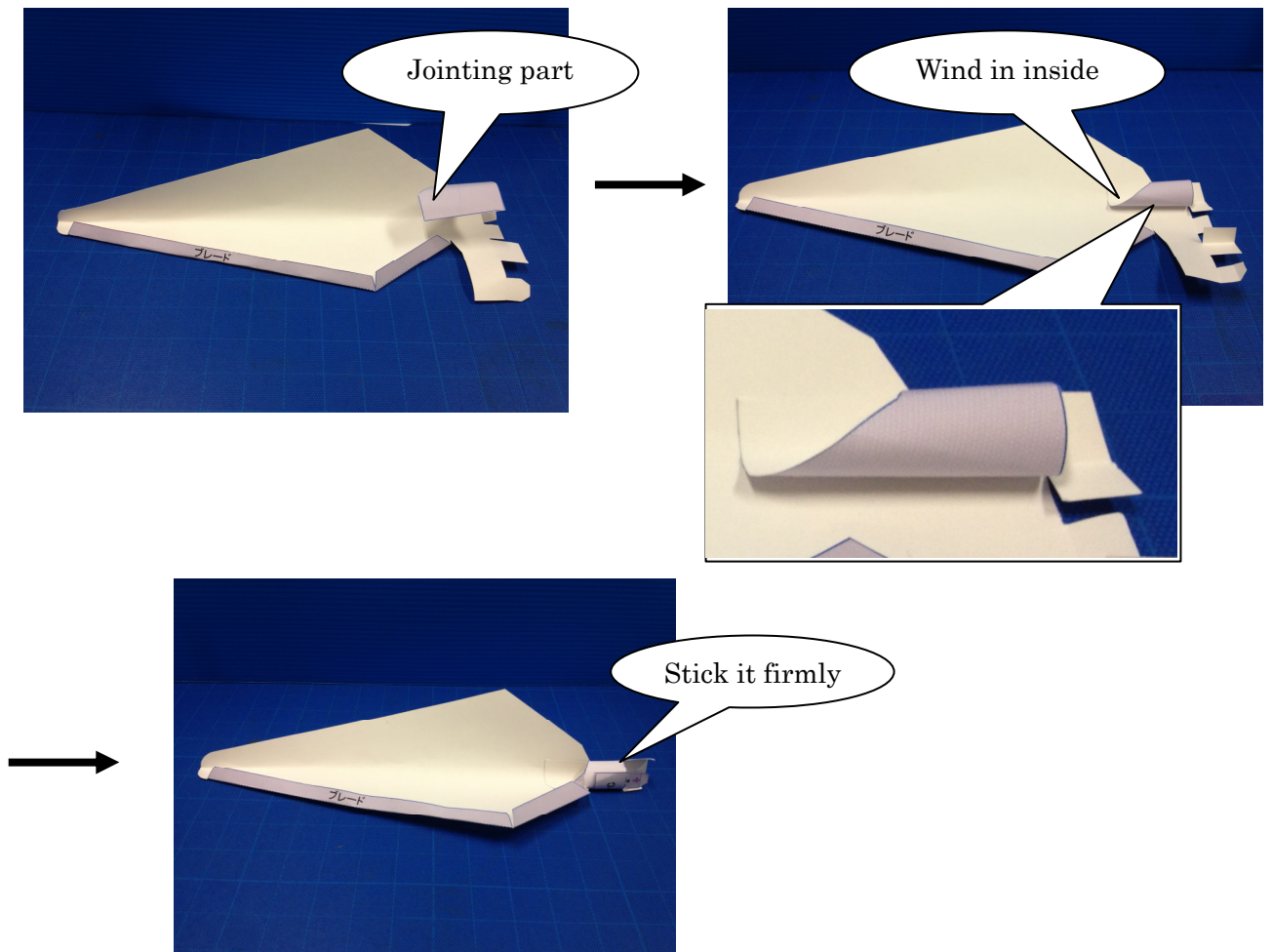
③ Glue the top of the motor case and attach the central axis.



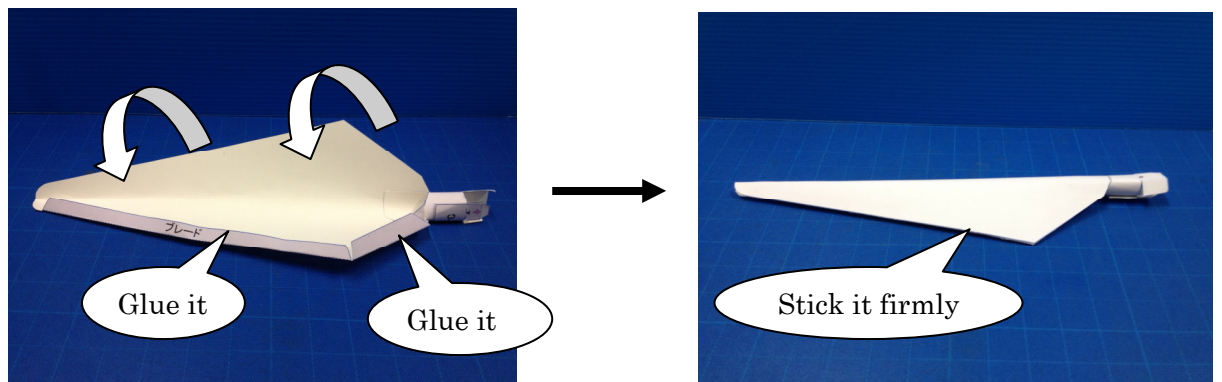
3. [Wind Turbine]

3-1 Rotor Blade

- ① Wind the jointing part in a cylindrical shape and glue it.

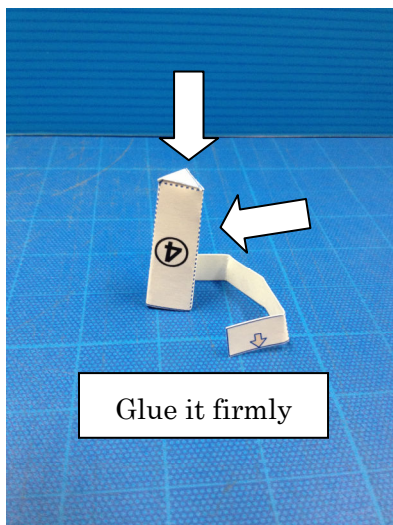
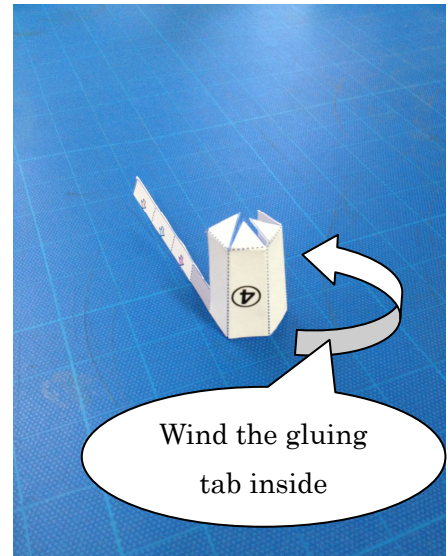
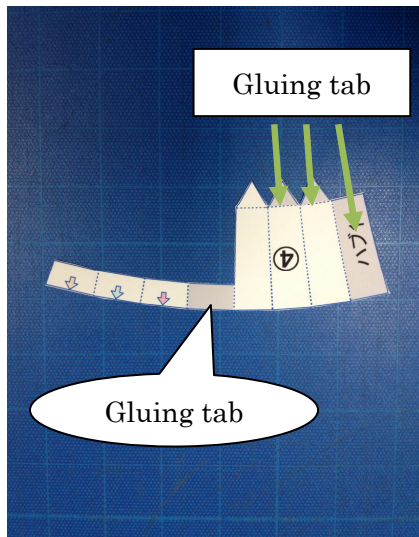


- ② Glue the outer edge of the blade and fold in inside.

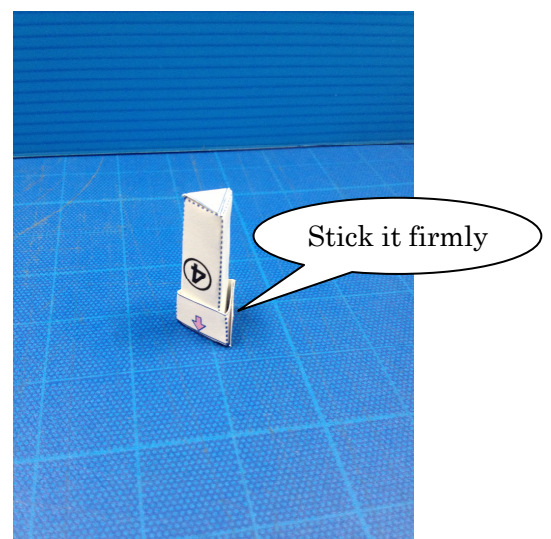
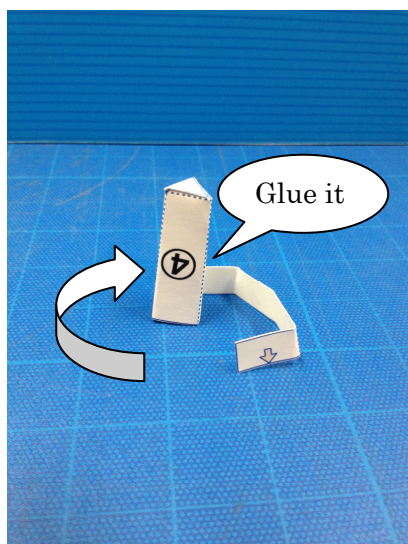


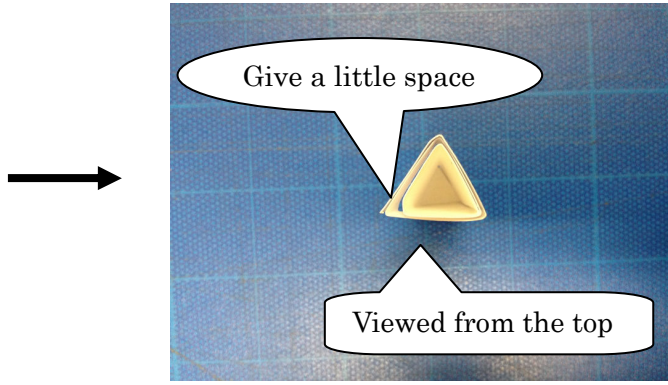
4. Hub 1

- ① Fold along the blue dotted line and glue the pointed tab. Afterward, assemble it in a tower shape.



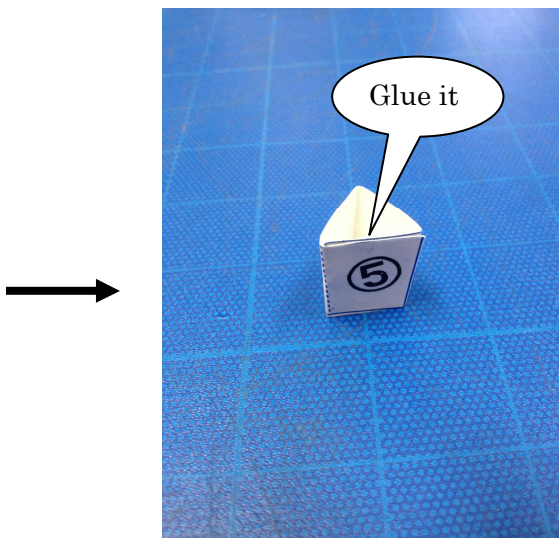
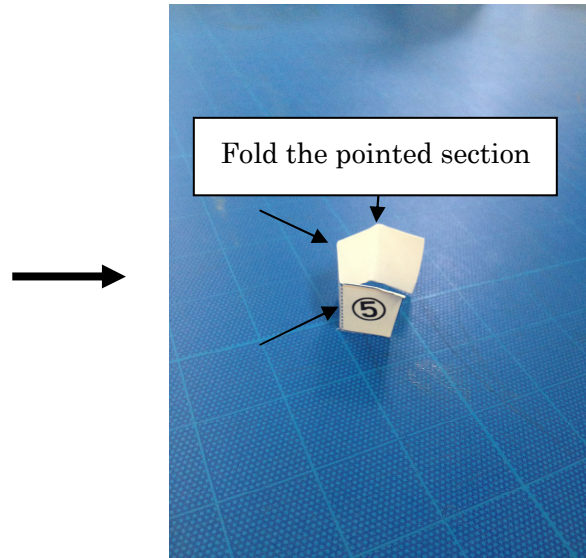
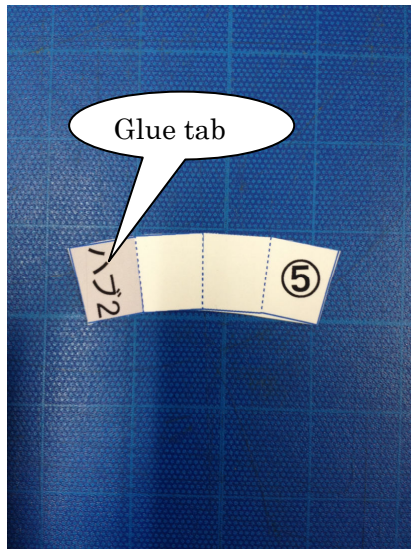
- ② Fold the outer flap and glue it.





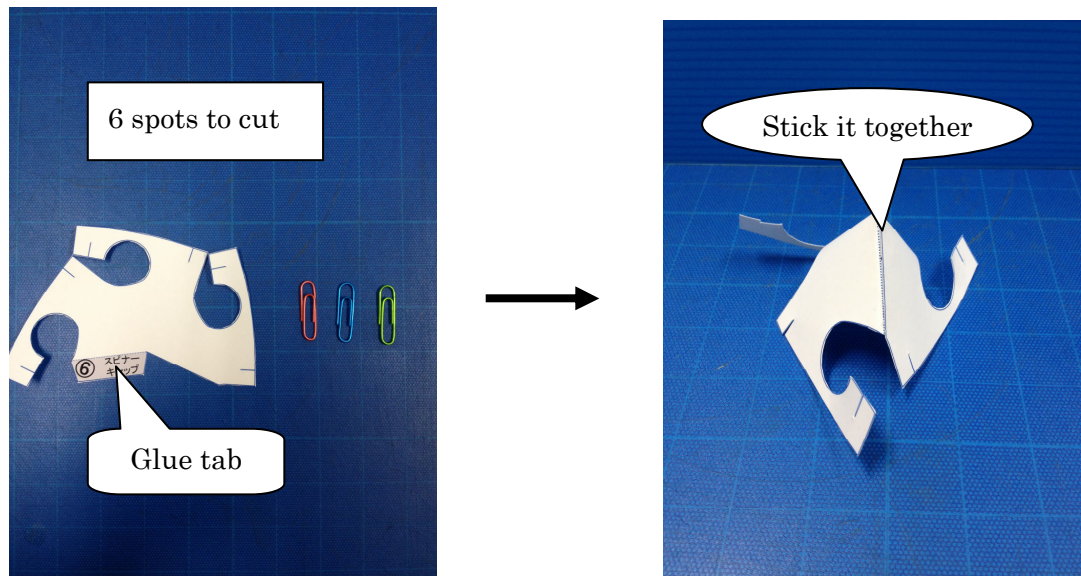
5. Hub 2

- ① Fold along the blue dotted line and assemble it in a tower shape.



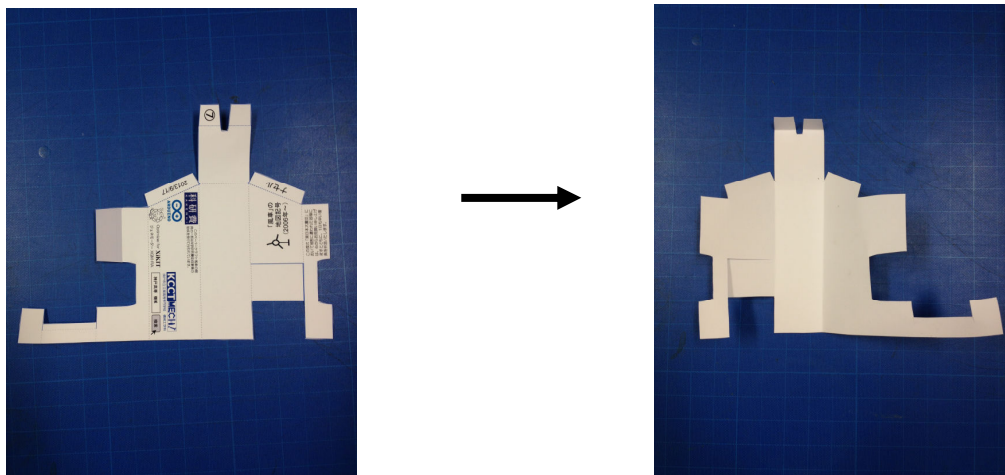
6. Spinner Cap

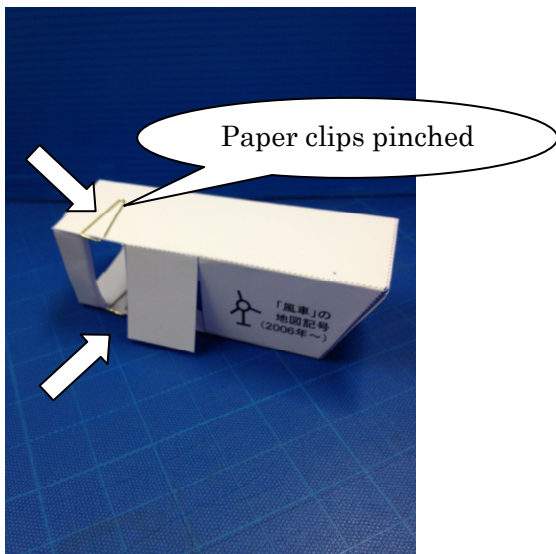
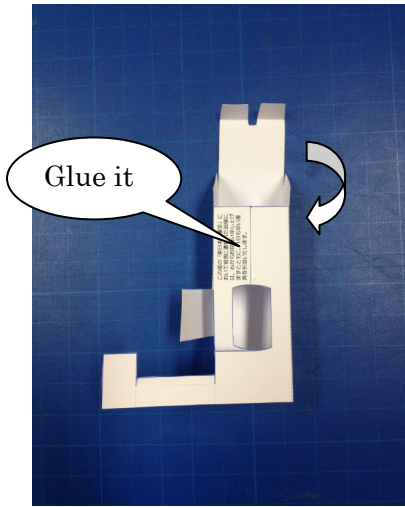
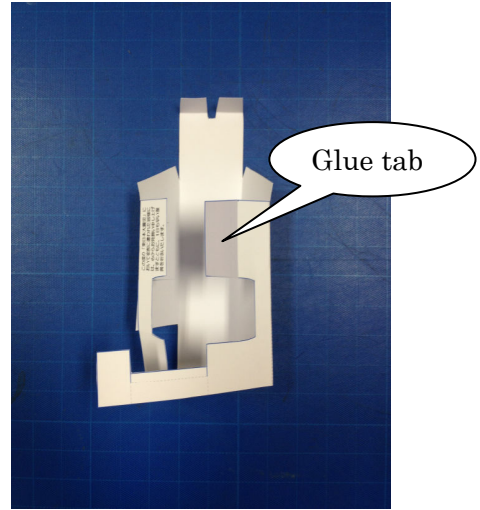
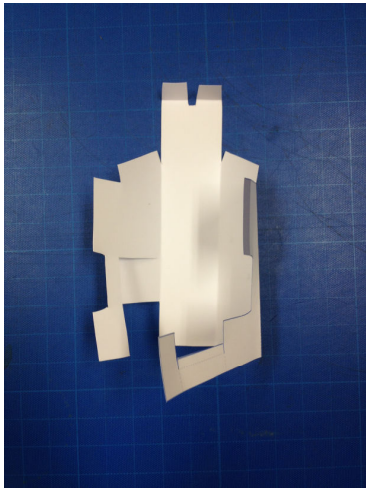
- ① Cut in along the blue line and assemble it in a corn shape.



7. Nacelle

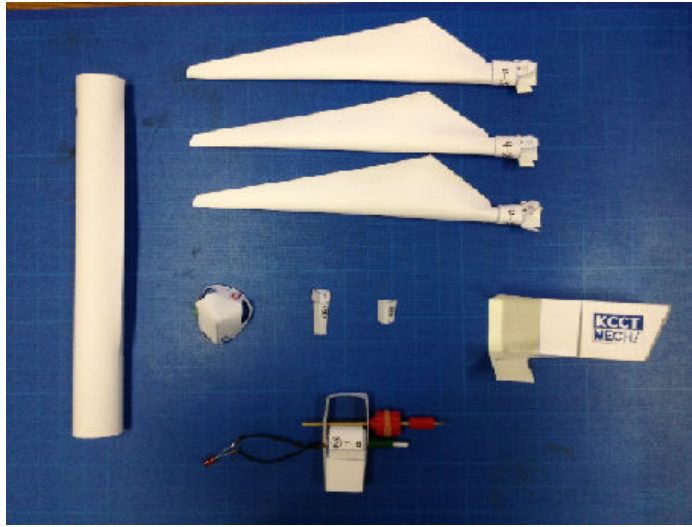
- ① Fold it along the blue dotted line and glue it in a boxed shape. After that, pinch it with a paper clip.



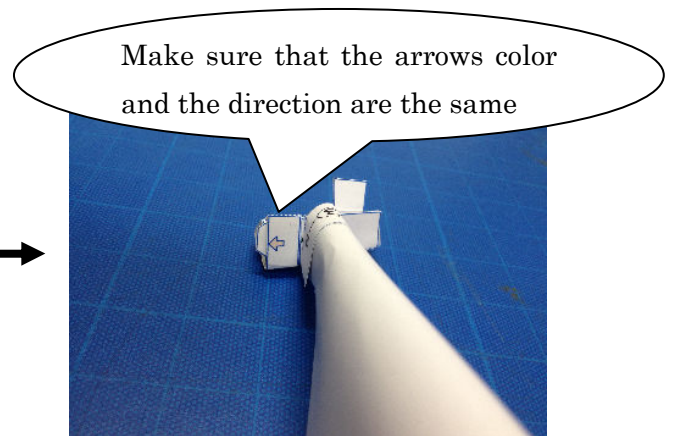
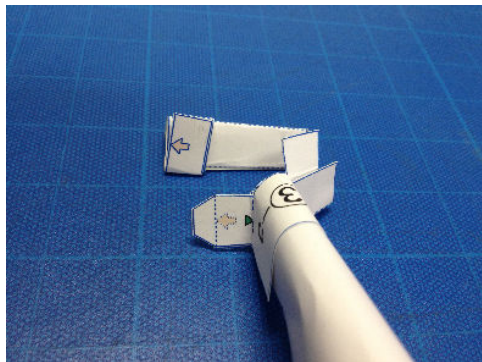


8. Assembling

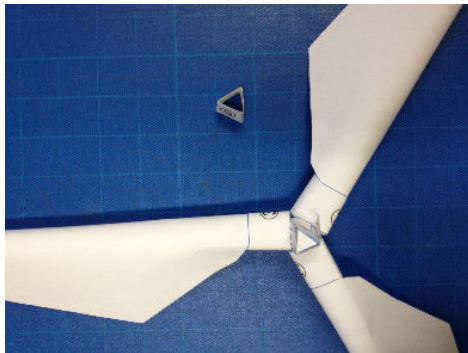
- ① Make sure that all parts are in shape.

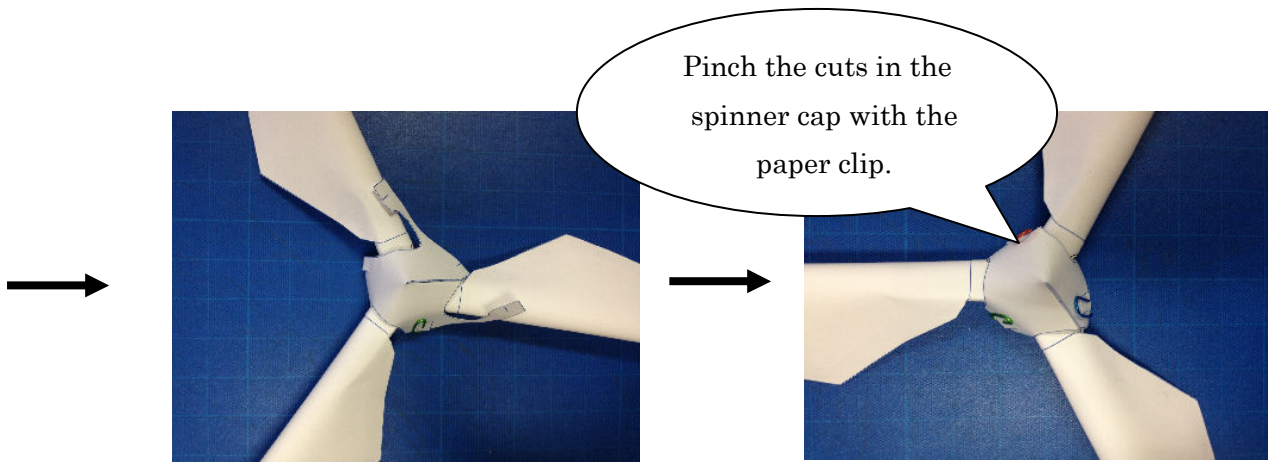


- ② Attach hub 1 to the rotor blade.

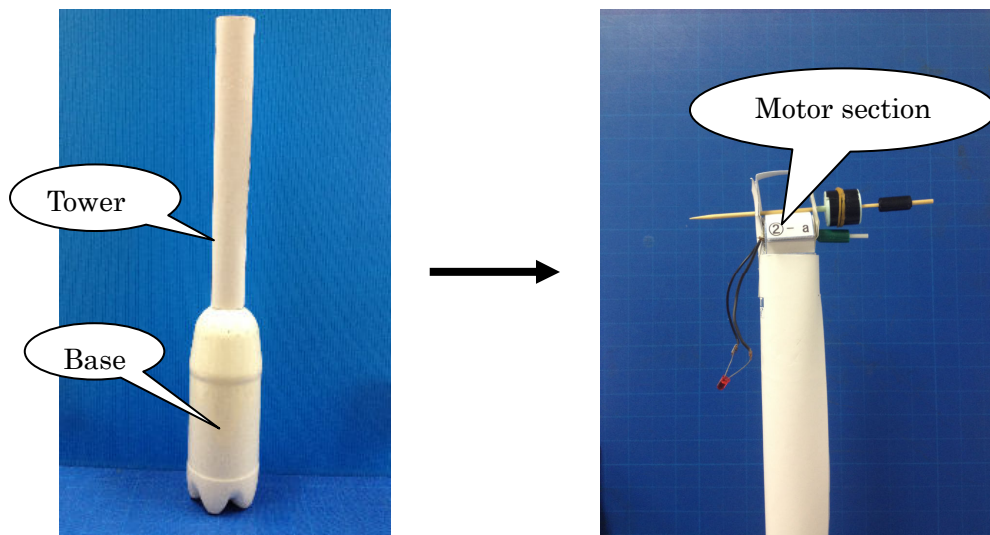


- ③ Attach three rotor blades. Hold it with hub 2 and cover it with the spinner cap.

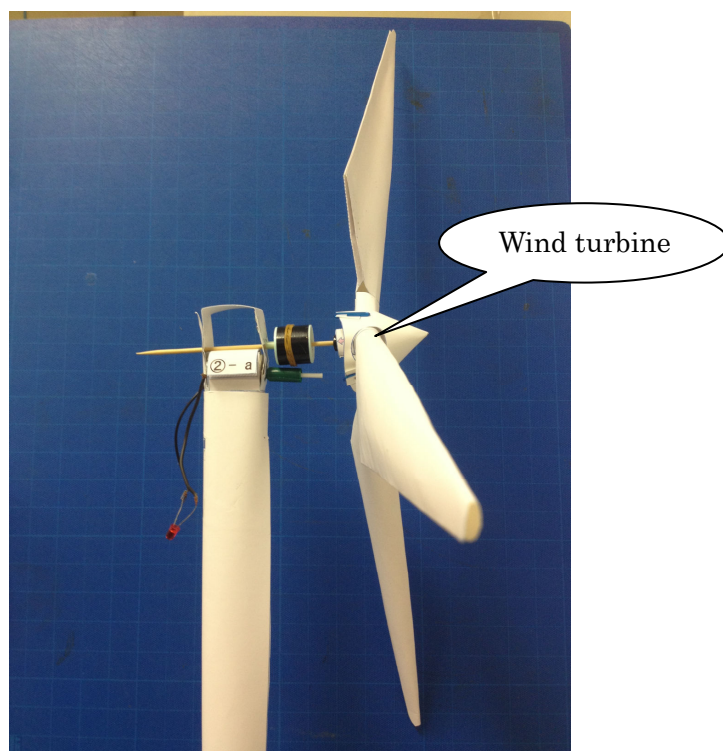




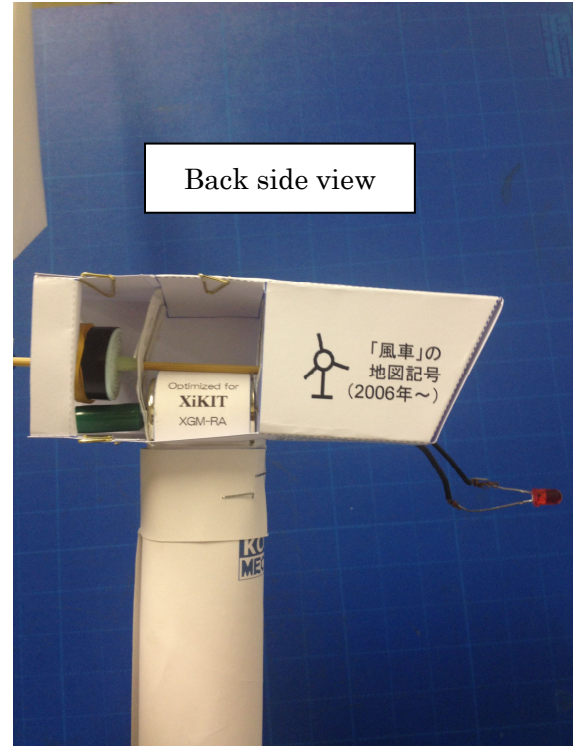
- ④ Pour water in a plastic bottle for the base. Then attach the tower and the motor section.



- ⑤ Attach the turbine on the tip of the central axis.



⑥ Attach the nacelle.



Completed Shape

